

A Guide To The Beetles Of Australia

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At last a compact, affordable and beautifully illustrated beetle book with coloured photos and easily understood descriptions has been published. The authors have gone to great lengths to produce a very comprehensive guide to all the families of Beetles that occur in Australia and it will be of great use both by amateur as well as members of the scientific community. This will enable one to quickly identify beetles to the family level using the photos of live beetles and the concise but very clear descriptions in this new book. The coloured photos are so superb of the complete adult beetles posing in their natural habitat, it is like having the live beetle in ones hand. The photos are often larger in size than the actual beetle in real life so the identification is often successful without even the use of a microscope.

The book begins with an **Introduction** that explains what makes a beetle and what “use“ beetles are, using both photos of world class (almost all of the photos, over 400, of the beetles are of live insects in a natural setting. So this will be so useful for scientific field or laboratory work, amateur naturalists or even suburban gardeners wanting identifications.

The next section is on **Anatomy** and has very clear descriptions of anatomy, various types of antennae (the photos of the antennae are clear and are almost self explanatory to explain the taxonomic term normally used in the written identification keys). The thorax, legs and the wings of the beetles have very clearly drawn illustrations, once again, making this book more user friendly than so many massive scientific taxonomic texts of the past.

The next section contains a detailed description of the **Reproduction and Development** of the larvae and adults of Beetles with numerous photos and clear and very detailed easily understood descriptions.

Food and Survival section next containing the type of food that they consume and the defences they use against their many predators.

Then, the next section is on the **Higher level of taxonomy of the Beetles**, listing suborders, and all superfamilies. This is a brief outline of four suborders and a number of superfamilies into which the families are placed. This also contains both general and specific details of the superfamilies of their taxonomic features, feeding habits, ecological data and information on those superfamilies with specimens that are known to be pests.

The next section is the Main section of the book it is the **Family Descriptions**, this covers all families that occur in Australia (177 pages). The Family Descriptions are written in a very clear, concise and easy to follow with straight forward characters listed first then photos of world class accuracy of live beetles, and where no photos they have obtained permission of illustrations from CSIRO publications. So all families have at least one form of illustration be it photo or drawn illustration however some of the more diverse families have over 20 photos that cover many of the different genera, within the family.

The **Families Descriptions** of each Family covers the following:

1. The known distributions throughout Australia
2. The beetle (larvae and adult) feeding habits
3. The ecology of both the larvae and the adults
4. The numbers of species and genera known in Australia
5. The photos are a mixture of beetles species from all states of Australia
6. Common names

After the family descriptions is a list of **Endnotes** listing over 53 references, covering taxonomic and general habits and personal communications from Australian and overseas scientists who are specialists studying Beetles.

Next is a very detailed **Glossary** (over 250 terms detailed) which explains all the taxonomic or scientific terms used any where throughout the book.

Next is a very useful Index of “**Common Names**“ of many of the species of Beetles photographed or

described in the book, this is often very useful for both general and scientific information reporting.

The authors in the process of producing this book have had direct support by working with over 20 of Australia and the world's leading Beetle's experts on taxonomic, biology and ecological areas of all the beetle families of Australia. They have also accessed other resources such as websites and even photos of some specimens from the Australian Museum collections.

As the book is in paperback form and the price is only \$44.95, this allows it to be available to amateur young insect collectors, naturalists, scientific laboratories that study insects in details and most important this makes it a great value for money buy for University students of Biological and Agriculture courses. As Beetles are the most commonly found insects and they are the most prolific insect group as far as families and species go the lack of a book covering them has been wanting for many decades. As Beetles are often the main insect group used in many environmental impact assessment reports for the effects over time from suburban or country areas affected by pollution from such things as mining, harvesting native forests, pollution from factories etc, this will be of great benefit in quickly identifying the beetles for these reports.

I have been assisting to teach Taxonomic Entomology courses at the University of Sydney for eleven years now and there has been a desperate need for a text such as this to give the students the chance to actually enjoy the learning and studying of insect identifications. There has been a great need for

a book on the taxonomy and details about Beetles of Australia of this standard for the scientific taxonomic, biological and ecological University courses for many years as the only other texts of Beetles prior to this one has been large scientific volumes covering all insect groups often costing hundreds of dollars. As the book is so reasonably priced at \$44.95 and is a compact paperback, the students can take it out on their collecting field trips to guide them to where and what beetles they may find as they forage for their university course collections. The authors have also added many unusual biological and behaviour notes that the students will find enjoyable to learn about beetles as they are the most commonly collected insect by students. The general public who may be interested in beetles, will find this a reasonably priced text, interesting, enjoyable and informative book. The scientific community will make great use of this new beetle book as it has the most up to date taxonomic data, the photos are so clear, concise and so large. The photos are of beetles from all the different states of Australia so it will be of great general use throughout Australia. The easily followed description keys, the life histories, the food habits, the natural habitat in the wild, the listing of total species numbers, information of introduced species, behaviour data, the size range of the beetles and plant associations all in one book, make it an absolute must have for all scientific biological laboratories and institutions working on any insect research of beetles in Australia.

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